

THAT WHICH IS CLAIMED IS:

1. A juice extractor comprising:
pairs of opposing cups being relatively movable
for squeezing fruit therebetween;
a pair of drive members extending along opposite
sides of said pairs of opposing cups;
a plurality of strainer tubes associated with
respective pairs of opposing cups;
an orifice tube beam having opposing ends
slidable along medial portions of respective drive members;
a plurality of orifice tubes extending from said
orifice tube beam for reciprocal movement within respective
strainer tubes; and
a pair of orifice tube beam locks for selectively
locking said orifice tube beam to the medial portions of
said respective drive members.

2. A juice extractor according to Claim 1
wherein each of said drive members has a recess at a medial
portion thereof; and wherein each of said orifice tube beam
locks comprises at least one key member and a lock handle
cooperating therewith for moving said at least one key
member between a locked position engaged within the recess
and an unlocked position disengaged from the recess.

3. A juice extractor according to Claim 2
wherein each drive member further comprises a respective
stop above the end of said orifice tube beam; and wherein
the recess and said at least one key member have
cooperating inclined portions to preload said orifice tube

beam against the stop when said at least one key member is moved from the unlocked position to the locked position.

4. A juice extractor according to Claim 2 wherein each of said orifice tube beam locks further comprises:

- a tubular body surrounding the medial portion of a respective drive member;

- a pair of spaced apart flanges carried by said tubular body;

- a U-shaped bracket transversely slidable on said tubular body between said flanges and carrying said at least one key member; and

- a cam rotatably carried by opposing ends of said U-shaped bracket and connected to said lock handle.

5. A juice extractor according to Claim 1 further comprising at least one adjustable spacer associated with each orifice tube beam lock.

6. A juice extractor according to Claim 1 further comprising:

- an end member connected between opposing ends of said pair of drive members; and

- a lift assist connected between said end member and said orifice tube beam for moving said orifice tube beam between a lower maintenance position and an upper operating position.

7. A juice extractor according to Claim 6 wherein said lift assist comprises:

- a pair of hinges extending between said end member and said orifice tube beam; and

at least one spring connected to said hinges to urge said orifice tube beam to the upper operating position.

8. A juice extractor according to Claim 7 wherein each hinge comprises:

a lower arm having a lower end pivotally mounted to said end member; and

an upper arm having an upper end pivotally connected to said orifice tube beam and a lower end pivotally connected to a medial portion of said lower arm.

9. A juice extractor according to Claim 8 wherein said lift assist further comprises a lift assist handle connected between upper ends of said lower arm.

10. A juice extractor comprising:

pairs of opposing cups being relatively movable for squeezing fruit therebetween;

a pair of drive members extending along opposite sides of said pairs of opposing cups;

a plurality of strainer tubes associated with respective pairs of opposing cups;

an orifice tube beam having opposing ends slidable along medial portions of respective drive members;

a plurality of orifice tubes extending from said orifice tube beam for reciprocal movement within respective strainer tubes;

an end member connected between opposing ends of said pair of drive members; and

a lift assist connected between said end member and said orifice tube beam for moving said orifice tube

beam between a lower maintenance position and an upper operating position, said lift assist comprising

a pair of hinges extending between said end member and said orifice tube beam,

at least one spring connected to said hinges to urge said orifice tube beam to the upper operating position, and

a lift assist handle connected between medial portions of said pair of hinges.

11. A juice extractor according to Claim 10 wherein each hinge comprises:

a lower arm having a lower end pivotally mounted to said end member; and

an upper arm having an upper end pivotally connected to said orifice tube beam and a lower end pivotally connected to a medial portion of said lower arm.

12. A juice extractor according to Claim 11 wherein said lift assist handle is connected between upper ends of said lower arm.

13. An orifice tube beam lock for a juice extractor comprising pairs of opposing cups; a pair of drive members extending along opposite sides of the cups, each drive member having a recess at a medial portion thereof; and an orifice tube beam having opposing ends slidable along medial portions of respective drive members, the orifice tube beam lock comprising:

a tubular body;

a bracket transversely slidable on said tubular body;

at least one key member carried by said bracket;
and

a lock handle carried by said bracket for moving said at least one key member between a locked position engaged within the recess and an unlocked position disengaged from the recess.

14. An orifice tube beam lock according to Claim 13 wherein said bracket comprises a U-shaped bracket including a bight portion and a pair of legs extending outwardly therefrom.

15. An orifice tube beam lock according to Claim 14 where said at least one key member comprises a first key member carried by the bight portion of the U-shaped bracket, and a second key member slidably carried between opposing legs of said U-shaped bracket.

16. An orifice tube beam lock according to Claim 14 further comprising a cam rotatably carried by opposing ends of said U-shaped bracket and connected to said lock handle.

17. An orifice tube beam lock according to Claim 13 wherein said at least one key member has an inclined portion that cooperates with an inclined portion of the recess to preload the orifice tube beam.

18. An orifice tube beam lock according to Claim 14 further comprising a pair of flanges carried by said tubular body for retaining said U-shaped bracket thereon.

19. A lift assist for a juice extractor comprising pairs of opposing cups, a pair of drive members

extending along opposite sides of the pairs of opposing cups, an orifice tube beam having opposing ends slidable along medial portions of respective drive members, and an end member connected between opposing ends of the pair of drive members, the lift assist for moving the orifice tube beam between a lower maintenance position and an upper operating position, the lift assist comprising:

a pair of hinges extending between the end member and the orifice tube beam;

at least one spring connected to said pair of hinges to urge the orifice tube beam to the upper operating position; and

a lift assist handle connected between medial portions of said pair of hinges.

20. A lift assist according to Claim 19 wherein each hinge comprises:

a lower arm having a lower end pivotally mounted to the end member; and

an upper arm having an upper end pivotally connected to the orifice tube beam and a lower end pivotally connected to a medial portion of said lower arm;

21. A lift assist according to Claim 20 wherein said lift assist handle is connected between upper ends of said lower arm.

22. A method for selectively locking an orifice tube beam in an operating position of a juice extractor, the juice extractor comprising a pair of drive members slidably carrying opposing ends of the orifice tube beam, the method comprising:

selectively locking a pair of orifice tube beam locks to medial portions of the drive members to thereby selectively lock the orifice tube beam in the operating position.

23. A method according to Claim 22 further comprising providing each of the drive members with a recess at the medial portion thereof; and wherein each orifice tube beam lock comprises at least one key member and a lock handle cooperating therewith for moving the at least one key member between a locked position engaged within the recess and an unlocked position disengaged from the recess.

24. A method according to Claim 23 wherein the orifice tube beam lock comprises a lock handle cooperating with the at least one key member for moving the at least one key member to a locked position.

25. A method according to Claim 23 wherein the recess and the at least one key member have cooperating inclined portions for preloading the orifice tube beam.

26. A method according to Claim 24 wherein each of the orifice tube beam locks further comprises:

- a tubular body surrounding the medial portion of a respective drive member;

- a U-shaped bracket transversely slidable on the tubular body and carrying the at least one slidable key member; and

- a cam rotatably carried by opposing ends of the U-shaped bracket and connected to the lock handle.

27. A method for moving an orifice tube beam of a juice extractor between a lower maintenance position and an upper operating position, the juice extractor comprising a pair of drive members slidably carrying opposing ends of the orifice tube beam and an end member connected to ends of the drive members, the method comprising:

installing a lift assist to the juice extractor, the lift assist comprising a pair of hinges extending between an end member and the orifice tube beam, at least one spring connected to the hinges to urge the orifice tube beam to the upper operating position, and a lift assist handle connected between medial portions of the pair of hinges; and

grasping and raising the lift assist handle to move the orifice tube beam from the lowered maintenance position to the upper operating position.

28. A method according to Claim 27 wherein each hinge comprises:

a lower arm having a lower end pivotally mounted to the end member; and

an upper arm having an upper end pivotally connected to the orifice tube beam and a lower end pivotally connected to a medial portion of the lower arm.

29. A method according to Claim 28 wherein the lift assist handle is connected between upper ends of the lower arm.